Communications
COMMAND, CONTROL, COMMUNICATIONS, COMPUTER, AND INFORMATION
SYSTEMS REQUIREMENTS

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This instruction establishes procedures for acquiring command, control, communications, computer, and information (C4I) systems for all units receiving C4I systems support on Laughlin Air Force Base, Texas. It defines and assigns responsibilities of the C4I Panel and implements AF 33-series instructions.

1. Introduction: The C4I systems requirements process is identification of the requirement, development of a technical solution, allocation of resources, and implementation of the requirement. Requirements are identified on a C4I Systems Requirements Document. The process enables users and C4I managers to obtain new C4I capabilities. *Summary of Changes*: Update office symbols, organizations, and terminology. Changed frequency of C4I Panel from every six months to at the call of the chairperson.

2. Terms Explained:

2.1. Base-Level C4I Infrastructure: Both host and tenant organizations use the base-level C4I systems infrastructure. The infrastructure includes all aspects of C4I systems. It generally consists of the base telephone and wire system communications centers, and common user networks.

2.2. C4I System. The C4I system is an integrated system of doctrine, procedures, organizational structures, personnel, equipment, facilities, and communications designed to support a commander through all operational phases. It includes base visual-information support systems.

2.3. C4I Systems Officer (CSO). The term CSO identifies the supporting C4I systems officer at all levels. At base level, this is the commander of the communications unit (47 CS/CC) responsible for carrying out base C4I systems responsibilities. At MAJCOM, it is the person designated by the Commander as responsible for overall management of C4I Systems in the command.

2.4. C4I Systems Requirement. Identifies a C4I systems mission shortfall or system need to the CSO. A C4I systems requirement arises when an organization cannot accomplish its current or new mission; can increase operational efficiency or cut operational costs by using advances in technologies; or can modernize an existing C4I system by applying modern technology to satisfy evolving C4I systems requirements, improve mission performance, and reduce current or future operation and support costs.

2.5. Technical Solution. A detailed description of the most cost-effective and efficient method to satisfy a C4I requirement. It also must incorporate into or not impact the base C4I infrastructure and meet all downward directed architectures and integration standards. It identifies recommended acquisition methods and strategies, estimates one-time and recurring costs and identifies manpower impacts.

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2.6. Service Need Date. The date the customer requires the technical solution implemented based on their specific need and their availability of resources.

2.7. Approval for Implementation. Customer confirmation that:

2.7.1. The technical solution satisfies the operational requirement.

2.7.2. The technical solution increases mission effectiveness or increases operational efficiency.

2.7.3. All resources identified in the technical solution can be provided.

2.8. Systems Telecommunications Engineering Manager Base-Level (STEM-B): Dedicated C4I systems engineer located at the 38 Engineering Installation Wing, Tinker AFB OK responsible for developing and maintaining the Laughlin Blueprint and is the engineering focal point for all requirements affecting the Laughlin C4I infrastructure.

2.9. C4I Blueprint: The C4I master plan, showing current capabilities, existing shortfalls and a target architecture for Laughlin AFB. It is the primary planning document for funding and implementing C4I systems requirements.

2.10. Local Area Network (LAN): The electronic grouping of computer systems within and between functional areas/buildings to share data/files, electronic mail, and etc.

2.11. Automatic Data Processing Equipment (ADPE): All computers are considered ADPE and are under the authority of the Wing Equipment Control Officer (ECO).

2.12. Wing Equipment Control Officer (47 CS/SCB): The individual who has responsibility for and authority over the entire base ADPE inventory.

3. Organization: Following are members of the C4I Panel:

3.1. 47 FTW/CC (Chairperson; can be delegated to 47 FTW/CV)

3.2. 47 OG/CC

3.3. 47 SPTG/CC

3.4. 47 MDG/CC

3.5 47 OG/MA

3.6. 47 CS/CC (Recorder)

3.7. 47 CPTF/CC

3.8. 47 CONS/CC

3.9. 47 CES/CC

4. Responsibilities:

4.1. Chairperson: Chairs the panel and approves or disapproves the Laughlin C4I Blueprint. Delegates approval authority for C4I systems requirements by types and dollar limitations.

4.2. CSO:

4.2.1. Acts as C4I Panel recorder.

4.2.2. Advises the board of the status of C4I requirements.

4.2.3. Tasks functional offices of primary responsibility with specific requirements in support of C4I needs normally through an engineered program support agreement.

4.2.4. Obtains technical solutions and ensures they meet C4I integration criteria.

4.2.5. Implements technical solutions accepted (approved) by the requesting organization.

4.3. STEM-B:

4.3.1. Briefs the status of the C4I Blueprint.

4.3.2. Acts as engineering consultant on C4I matters affecting the base infrastructure.

4.3.3. Assists in the development of technical solutions and costing for C4I requirements.

4.3.4. Provides guidance for C4I requirements integration into existing and planned architectures.

4.4. 47 CES/CC:

4.4.1. Ensures prewiring is included in all major and minor construction projects.

4.4.2. Provides status of support construction for C4I projects.

4.5. 47 CONS/CC:

4.5.1.   Provides acquisition strategy for C4I requirements.

4.5.2.   Provides status of purchase orders for C4I requirements.

4.6. 47 SPTG/LGS:

4.6.1. Provides status of supply requisitions for C4I requirements.

4.6.2. Provides secure, dry storage for C4I project materiel.

4.7. 47 CPTF/CC:

4.7.1. Provides funding strategy for C4I requirements.

4.7.2. Provides status of funds for C4I requirements.

4.8. Panel Members:

4.8.1. Review mission requirements for C4I needs and ensure they are included in the C4I Blueprint.

4.8.2. Advocate their requirements.

5. Procedures:

5.1. The C4I Panel meets at the call of the chairperson to validate at a minimum the C4I Blueprint, restoral priorities, and etc.

5.1.1. The CSO can establish C4I sub-panels comprised of customers and functional experts to consider LAN/ADPE, Telephone, LMR, Cellular, Pagers, and others as necessary.

5.1.2. The sub-panel will analyze requirements and propose solutions as well as acquisition and funding strategies to the C4I Panel.

5.2. C4I requirements can be submitted anytime. They must be complete and incorporate adequate lead time for processing, acquisition, and installation. Use the following as general guidelines:

5.2.1. Base Telephone Service: 5 - 10 working days.

5.2.2. Leased Longhaul Service: 180 days.

5.2.3. Radio Frequencies: 180 days.

5.2.4. ADPE (standard contracts): 90 - 120 days.

5.2.5. Land Mobile Radios: 90 - 120 days..

5.2.6. Telephone Cable: 365 days.

5.3. Telephone requirements involving installation, relocation, or removal of equipment must include a sketch of the affected locations.

5.4. 47 SPTG/CC, 47 OG/CC, and 47 MDG/CC have approval authority up to $50,000 for the following:

5.4.1. Computer requirements to include hardware and/or software. Group Commander signature on the AF Form 9, Request for Purchase, constitutes approval. The AF Form 9 must then be sent to 47 CS/SCB to obtain a tracking number and/or update of the Five-Year Computer Plan.

5.4.2. Land Mobile Radio requirements to include pagers, bricks, and cellular phones. Group Commander signature on the AF Form 9 or AF Form 601, Equipment Action Request, constitutes approval. The AF Form 9 or AF Form 601 must then be sent to 47 CS/SCM for review and coordination.

5.5. 47 CS/CC and 47 CS/SCM have approval authority up to $5000 for telephone installation removal, telephone answering machines, and additions which require modification to current telephone maintenance contracts.

5.6. Other C4I requirements are submitted in accordance with the C4I Requirements Table provided in this instruction. You may use the AF Form 3215, Communications-Computer Systems Requirement Document, or the format in attachment 2 to document your requirement.

C4I REQUIREMENTS TABLE

IF YOU NEED:	THEN SUBMIT TO:
Base Telephone Services	47 CS/SCM
Defense Data Network Access Cards	47 CS/SCB
Facsimile	47 CS/SCM
Frequency Requests	47 CS/SCM
HF/VHF/UHF Radios	47 CS/SCX
Land Mobile Radio (LMR)/Pager/Cellular Phone	47 CS/SCM
Long Haul Telecommunications	47 CS/SCM
Local area networks	47 CS/SCX
Small Computers/Software	47 CS/SCB
Telephone Cable	47 CS/SCX
UNISYS User ID	47 CS/SCB
Requirements Not Identified Above	47 CS/SCX

GARY A. WINTERBERGER, Colonel, USAF
Commander

3 Attachments
1. LMR/Pager/Cellular Phone Matrix
2. Requirements Document Format
3. LAN Checklist

(Date)

MEMORANDUM FOR

FROM:

SUBJECT: COMMAND, CONTROL, COMMUNICATIONS, COMPUTER, AND INFORMATION SYSTEMS REQUIREMENTS DOCUMENT

1. <u>Requesting Office Point of Contact:</u> (Name, rank, title, organization, office symbol and telephone number of individual who can provide additional information about the requirement).

2. <u>Mission Requirement</u>: (Description in functional terms telling what you need. Provide all pertinent information to clearly show what capability is required (not how it should be done) and why existing resources are not adequate. Include any special operational requirements, parameters and interfaces, such as processing classified or sensitive information, interfacing or potential interfacing with other existing or planned systems. Requirements for LANs must include the completed checklist shown in atch 2.

3. <u>Service Need Date</u>: (Date the requesting organization requires the technical solution implemented based on their specific need and their availability of funds).

4. <u>Authorizing Official</u>: (Normally the unit commander or designated representative).

LOCAL AREA NETWORK (LAN)

CHECKLIST

1. Have you clearly stated the requirement?

2. Have you identified connectivity requirements to other offices, systems or other existing or future LANs (including the planned base-wide LAN)?

3. Have you listed your existing equipment, i.e., computers (type and number) types of LAN cards, cabling etc.?

4. Have you identified who you want to talk to over the LAN (Civil Engineers, Comm, Wing, AETC etc.)?

5. Have you included on and/or off base electronic mail (E-mail) requirements? If so, have you identified your requirement for access to the Defense Data Network (DDN)?

6. Have you included any previous LAN efforts or proposed technical solutions whether by contractor, command or another agency?

7. Have you identified the number of people who will be connected both now and in the future (e.g., how many need connectivity for X number of computers with the capability to connect to X number more in the future, how many need connectivity to system "X" when operational)?

8. Have you identified alternative utility-type connections, such as phone jacks (allowing for growth/relocation)?

9. Have you provided a sketch or drawing showing the area affected?

10. Have you coordinated with and identified other users (or potential users) in your facility?

11. Have you identified your point of contact and who will manage the LAN when it becomes operational?

12. Have you determined if implementation requires use of Other Procurement (3080) funds? If so, are they identified in your Investment Equipment Financial Plan?

LMR/PAGER/CELLULAR PHONE

LOGIC MATRIX

	LMR	PAGER	CELLULAR
Mission is on base only	X		
Requires off base contact		X	
Constant on call with immediate response time		X	
Mission contact within unit	X		
Mission to monitor nets only	X		
Constant on call/requires immediate communications			X*
Protection of sensitive information (SP/OSI)	X@		
Classified transmission (OSI where LMR won't meet requirement)			X*#
Combat deployable	X		
Commanders or representative			
on base only	X		
off base contact only	X	X	
off base contact with immediate communications			X*

LEGEND:
* Cellular air time user funded   @Can use data encryption standards
# Can use cellular STU III for transmission of classified information